adifferent kind of oil & natural gas company

### LINN Energy

NASDAQ:LINE • NASDAQ:LNCO

## PAPA Annual Meeting February 2014



# adifferent kind of oil & natural gas company

LINN Energy's mission is to acquire, develop and maximize cash flow from a growing portfolio of long-life oil and natural gas assets.

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**Embrace & Drive Change** 

**Pursue Growth** 

**Take Action** 

**Respect Others** 

**Be Passionate** 

Connect

#### **LINN DA-5 Operational Update**



#### 2013 Drilling & Completions Activities

- There was no new construction in 2013.
- There were no wells drilled or completed.

#### 2014 Drilling & Completions Activities

- There is no planned construction in 2014.
- There are no plans to drill or complete new wells.

#### LGS Equivalent

- Currently have 10 wells connected to the LGS.
- Produced water is transported to NFX WDW #1 from Antelope CTB via pipeline.
- System is expandable to connect future well sites.
- A contract was entered into to electrify the LGS and NFX WDW #1.
  - Rocky Mountain Power has started construction and completion is expected this March.

#### **Water Summary**



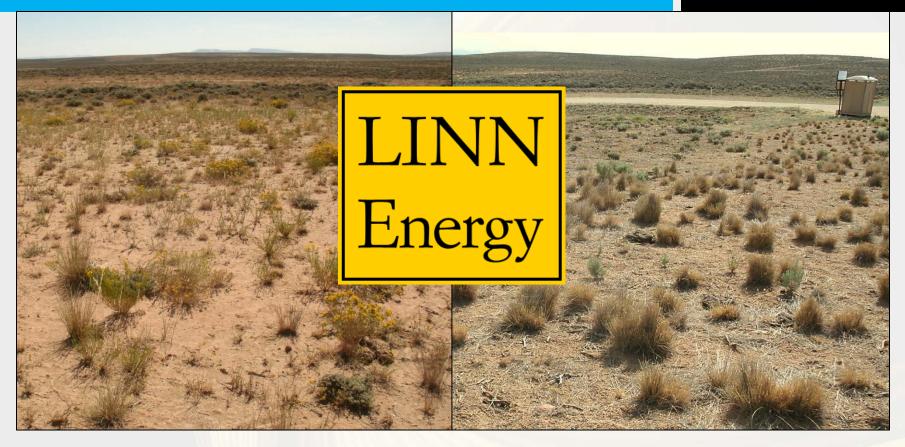
#### 2013 Water Use & Disposal

- 328,321 bbls of produced water from 31 producing wells was disposed of in the NFX WDW #1 salt water disposal well.
- There was a total of ~96,000 bbls of fresh water used from water wells in DA-5 for various completions activities.

#### 2014 Water Use & Disposal Projections

- LINN plans to dispose of similar produced water amounts as 2013.
- Fresh water from water wells in DA-5 may be utilized for workover activities in 2014.





**Reclamation of Anticline Assets** 

#### **History**



- LINN Energy is in control of 23 Anticline Pads.
- These assets have been under the ownership of LINN Energy for the past 1 year.
- Prior to this, the wells were owned by Newfield Energy.



#### **Infield Activities**



- Each year locations are qualitatively monitored and future reclamation actions are recommended.
- All locations are also quantitatively monitored, collecting species lists, basal cover, and shrub and forb density and frequency both on and off site.
- Spatial data is maintained and updated infield as needed.
- Photos are taken within the reclamation area and the reference area for a visual comparison.

#### **Reclamation Activities**



- Seeding
  - Early: consisting of mostly grasses and a few forbs
  - Late: consisting of mostly forbs and shrubs with a few grasses
- Weed control
  - Spot or full spray within the reclamation area
  - Bare ground spray within the long-term disturbance area
- Soil Amending
  - Liquid amendments
  - Solid amendments
- Vegetation Monitoring
- Within these collected attributes, CSR changes the reclamation plan to fit the ever changing need of a sites year to year.
- CSR reclamation plans are adaptive, ever changing and tailored to the needs of each site.

#### **Site Comparison**



#### Rainbow 5-31 Pad

2010 2013





#### **Status and Acreage**



#### Pinedale/Anticline

- 1 infrastructure has not met interim status
- Interim reclamation initiated on 21 Well Pads within PADMS
- 1 Site is in Interim Reclamation Full Development

#### **PADMS Surface Disturbance**

- Total surface disturbance 127.77 acres
- Total acres in reclamation 94.60
- 6.06 acres in Interim Reclamation Full Development

#### **Reasons For Low Success Rates**



- Harsh weather conditions and low precipitation
  - Late Shrubs & Forbs seeding occurred during drought years
  - (2 locations reseeded with Shrubs & Forbs in the Fall)
- Several sites developed without pre-disturbance monitoring
  - Therefore no baseline data is available



#### **Locations Reseeded in 2013**



Well Name	Topsoil Storage	Seeding Method	Date Seeded	Seed Mix	Main Forbs and Shrubs List	Pounds Per Acre
Rainbow 15-29	None	Drill	11/18/2013	Sagebrush- dominated w/ Sandy Soils	winterfat, four-wing Saltbush, Wyoming big sagebrush, scarlet globemallow, Lewis blue flax, Indian ricegrass, bottlebrush squirreltail, western wheatgrass, early Indian paintbrush, Rocky Mountain beeplant	17
Antelope 6-4	None	Drill	9/20/2013	Sagebrush- dominated w/ Sandy Soils	winterfat, four-wing Saltbush, Wyoming big sagebrush, scarlet globemallow, Lewis blue flax, Indian ricegrass, bottlebrush squirreltail, western wheatgrass, early Indian paintbrush, Rocky Mountain beeplant	17.55

#### **Soil Amendment Applications 2013**



Soil Amendment	Date of Application	Soil Amendment Type
Jonah WDW	5/23/2013	humic and fulvic acid
Antelope 4-15	5/23/2013	humic and fulvic acid
Antelope 5-4	5/23/2013	humic and fulvic acid
Rainbow 15-31	5/23/2013	humic and fulvic acid
Rainbow 9-31	5/23/2013	humic and fulvic acid
Antelope 6-4	5/23/2013	humic and fulvic acid

#### Closing



 All vegetation and spatial data has been collected, maintained, and provided by Conservation Seeding and Restoration, Inc.



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